

Russell Independent Schools Energy Management Policy

Russell Independent Schools would like to conserve energy to try to reduce operating costs and minimise damage to the environment. We will try to reduce our energy consumption by 20% over the next 5 years by the use of best practice, the latest engineering solutions and by educating as well as encouraging the commitment of faculty, students and employees of the district.

It is the intention of the Russell Independent Schools to:

- Ensure that Faculty, students, staff, customers and suppliers are made aware of our Energy policy.
- Adopt a whole of life costing approach to purchases, where particular attention is paid to energy efficiency.
- Reduce energy consumption, and thus, reduce carbon emissions.
- Improve overall energy efficiency
- Engineer solutions for saving energy rather than rely solely on manual intervention.
- Educate and encourage the motivation of faculty, students and staff within the district to save energy.
- Publicise these objectives
- Ensure all items identified in our action plan have been implemented
- Introduce energy conservation at the induction of new employees, customers and suppliers.

This energy policy will be reviewed regularly and will be updated to take into account changing business circumstances and ensure that that it provides opportunities for continuous improvement. The Energy policy will be managed by Mr. Doug Keaton and Russell Independent Schools Maintenance and Grounds Staff supervisor Mr. Dave Craft and supported by the Russell Board of Education and the district administrators.

We give our full commitment to this initiative and would ask you to give your full support too.

School Superintendent

Program Manager

Date _____

Date _____

Board energy Policy

I. Purpose:

The School District is responsible for the efficient use of its natural resources and shall provide leadership in developing a realistic energy ethic in the operation of its facilities to improve the learning and teaching environment and reduce energy consumption and associated costs.

II. General Statement of policy

The success of this policy is the joint responsibility of the board members, administrators, teachers, students and support personnel and is based on their cooperation. Every student and employee is expected to contribute to energy efficiency and be an "energy saver" as well as an "energy consumer"

The district shall provide information to the local media on the progress of the energy management program and its goals.

The school principals in the district shall be accountable for energy efficiency efforts in their facilities, working closely with the policy manager and his team of students.

The superintendent is directed to help develop the necessary administrative guidelines and plans to implement energy awareness and energy efficiency in the district.

Energy Management plan outline for the Russell Independent School District.

Objective

Russell Independent Schools is committed to promote energy efficiency to our faculty, staff, students and community.

We shall strive to conserve energy and improve the energy efficiency of our buildings, vehicles, and equipment and the goods and services that we use. We shall use environmentally safe and sustainable energy sources as often as practical while achieving savings. We shall strive to increase our use of energy from renewable sources.

We shall implement these principles by demonstrating community leadership, collaborative planning and by adopting best energy management practices. We shall establish goals, objectives and indicators; conduct an annual self-evaluation of our progress; and communicate regularly with the Russell Independent School community.

Responsibility

Faculty, staff and students must use energy prudently. Everyone must turn off lights when rooms are not in use. Each person is responsible for turning off energy using devices such as office equipment when they are not being used. One should not assume that someone else will do it. Occupied space temperature set points shall be maintained at the temperatures set forth in this policy. Windows and exterior doors must be kept closed to prevent the loss of conditioned air.

Faculty, staff and students should report inoperable equipment to Maintenance and wasteful practices to the Energy Management Team so corrective action can be taken. The Energy Management Team shall monitor utility usage and strive to promote and implement the guidelines outlined in this policy.

General Guidelines

Temperature - To maintain reasonable comfort and lower energy expenditures, the school district has established the following standards for comfort heating and cooling.

Summer thermostat settings (air conditioning) during occupied periods are to be 74-76°F. During unoccupied periods thermostats are to be set back to 78 °F.

Winter settings (heating) during occupied periods are to be 68-70°F.

During unoccupied periods, thermostats are to be set back to 65 °F.

Exceptions to these guidelines must be approved by the Board of Education and the Energy Management Team.

To properly sense temperature in rooms, areas around thermostats must be clear of computers, televisions, and other electric appliances that give off heat. Additionally, supply air vents must be clear of obstructions such as flags, banners, signs, etc., that may interfere with the design airflow which in turn affects occupant comfort.

Building Resource Management - Windows and doors should be kept closed during the heating season and during the summer in those areas that have mechanical cooling. Gym exhaust fans are to be turned off when the air conditioning unit serving that area is operating.

Every member of the school district should assume the responsibility of closing windows, turning off office equipment when not in use, and shutting off the lights when leaving a room.

Computer monitors should be turned off when not in use and printers should be turned off at the end of the day. Computers should be turned off when school will be out for extended periods such as Fall Break, Christmas Break, Spring Break and Summer Break. Energy management devices and strategies will continue to be added.

Schedulers of classes, meetings, and other school activities should endeavor to minimize energy use. Evening activities should be concentrated in the fewest areas possible, and where appropriate, the areas used should be those that already have late night temperature setback.

Lighting - Interior lighting shall be fluorescent, whenever possible. New energy-saving fixtures, lamps and ballasts will be used to replace existing less efficient lighting whenever economically feasible and appropriate. Exterior lighting will be high-pressure sodium or metal halide (metal halide is preferred) whenever possible, and will meet minimum current safety requirements.

Decorative lighting shall be kept to a minimum. Lighting levels recommended by the most recent edition of the IES (Illuminating Engineering Society) Lighting Handbook shall be used as guidelines. Where it makes economic sense, occupancy/motion sensors (ultrasonic or infrared) wired to area lighting will be installed to reduce and/or turn off lights in unoccupied, vacated areas. For example all Rest Rooms. Day-lighting controls will be installed, if economically feasible, to automatically adjust lighting levels as appropriate. Task lighting, such as desk lamps, is recommended to reduce overall ambient lighting levels. Teachers are encouraged to use task lighting at the end of the day after the students have left instead of the overhead fluorescent lighting. Compact fluorescent bulbs should be used in desk lamps. These are now readily available at local stores.

Space Heaters - Whether they are purchased by the school district or personal property, two issues affect the use of space heaters in buildings - fire safety and energy efficiency. All space heaters used must be approved for fire safety, as classified by the National Fire Protection Association and Energy Star Rated. No liquid fueled space heaters (e.g., kerosene heaters) shall be used in any office or classroom. Some electric space heaters also pose an unacceptable fire hazard.

All space heaters must meet the following four specifications: Heaters must (1) be UL approved, (2) have elements that are protected from contact, (3) be tilt-proof (when tipped over, heater goes off), and (4) be thermostat-controlled. Space heaters must be unplugged when not in use. The issue of energy efficiency is also important - electric space heaters are a very costly means of heating. If a member of the school district feels that a space heater is necessary for adequate warmth, this may indicate that the central heating system needs repair. Maintenance should be consulted if the central heating system is incapable of meeting comfort requirements.

Maintenance should also be contacted if a space heater is to be used to offset excessive air conditioning. Excessive cooling of a space below the summertime Temperature Guidelines should be reported to Maintenance so that air-conditioning levels can be adjusted.

Switchover from Heating to Cooling - Maintenance personnel perform required changeover from heating to air-conditioning in the Spring. Because of the varying equipment installed throughout the district, buildings must be changed over individually. Maintenance performs the changeover on the basis of priorities established to (1) provide comfort to students, (2) maintain required temperatures to protect equipment, and (3) serve the greatest number of individuals and activities. Air conditioning may not begin until outside temperature has reached 75 °F for three Consecutive days. Temperature projections are also considered. The wide swings in temperature during the Spring of the year and the difficulty in switching between heating and cooling make this policy necessary. Special problems or hardships with this policy should be addressed to the Director of Buildings and Grounds.

Switchover from Cooling to Heating - Maintenance personnel perform required changeover from air-conditioning to heating in the Fall. Because of the varying equipment installed throughout the district, buildings must be changed over individually. Facilities performs the changeover on the basis of priorities established to (1) provide comfort to students, (2) maintain required temperatures to protect equipment, and (3) serve the greatest number of individuals and activities. Heating may not begin until the high outside air temperature has dropped below at least 55 °F for three consecutive days. Temperature projections are also considered. The wide swings in temperature during the Fall of the year have made this policy necessary. Special problems or hardships with this policy should be addressed to the Director of Buildings and Grounds.

Holiday Periods - A period of closure for the school district offers a great opportunity to save money on utilities that can be spent in other areas. Past history has shown that very few people occupy the buildings for any substantial time during the holidays. With this in mind, buildings shall be only minimally heated/cooled during holiday periods. The exception to the policy will be buildings or areas that contain special collections or sensitive equipment, or buildings that are officially open during the holidays. Requests for exceptions to this policy with justification should be addressed to the Director of Buildings and Grounds after curtailment plans for the upcoming holiday period have been issued.

New Construction - The school district shall seek to reduce future energy costs in new facility construction and renovation whenever feasible. Current standards outlined in ASHRAE Standard No. 90.1 Energy Efficient Design of New Buildings Except Low Rise Residential Buildings shall be followed as closely as possible. Additionally, all city and state regulations shall be followed.

All planning for major construction and equipment purchase/installation must include energy life cycle costing. New equipment purchased must carry the ENERGY STAR label as often as practical. As resources become available, Russell Independent Schools shall develop and implement design standards for new construction to include energy efficiency.

Water Conservation - Russell Independent Schools is committed to promoting the conservation of water in addition to energy. Faculty, staff, and students should report malfunctioning water faucets, toilets and urinals to Maintenance so corrective action can be taken. Faculty and staff shall educate students on the importance of turning off water after using restroom facilities. The school district shall seek to implement methods of capturing rainwater for use in non-potable applications and shall use native plantings where possible to reduce the amount of watering needed.

Suggestions

The Energy Management Team encourages suggestions for additions or modifications to this Energy Plan as well as other energy or water conservation suggestions.

Please send to:

doug.keaton@ky.gov or dennis.chambers@russellind.kyschools.us.